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Dreher, Ingeborg
Moll, Thomas
Zahn, Stefanie

<120> Expression System for Preparing IL-15/Fc Fusion Proteins and Its Use

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<140> US 10/592,010

<141> 2006-09-07

<150> PCT/EP2005/003888

<151> 2005-04-13

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atactcatalc tcttcctttt tcaatattat tgaagcattt atcaggggtta ttgtctcatg	7380
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<210> 3
<211> 1113

<212> DNA
<213> Artificial sequence

<220>
<223> DNA for mutated IL-15/Fc with CD5 leader

<400> 3
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gtaacagcaa tgaagtgctt tctcttggag ttacaagtta tttcaattga gtccggagat 240
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<210> 4
<211> 370
<212> PRT
<213> Artificial sequence

<220>
<223> Amino acid sequence of human CRB-15 with CD5 leader

<400> 4

Met Pro Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly

1	5	10	15
Met Leu Val	Ala Ser Cys Leu Gly	Asn Trp Val Asn Val	Ile Ser Asp
	20	25	30
Leu Lys Lys	Ile Glu Asp Leu Ile Gln Ser Met His	Ile Asp Ala Thr	
	35	40	45
Leu Tyr Thr	Glu Ser Asp Val His Pro Ser Cys Lys	Val Thr Ala Met	
	50	55	60
Lys Cys Phe	Leu Leu Glu Leu Gln Val Ile Ser Leu Glu Ser Gly Asp		
	65	70	75 80
Ala Ser Ile His	Asp Thr Val Glu Asn Leu Ile Ile Leu Ala Asn Asn		
	85	90	95
Ser Leu Ser	Ser Asn Gly Asn Val Thr Glu Ser Gly Cys Lys Glu Cys		
	100	105	110
Glu Glu Leu	Glu Glu Lys Asn Ile Lys Glu Phe Leu Asp Ser Phe Val		
	115	120	125
His Ile Val	Asp Met Phe Ile Asn Thr Ser Asp Pro Lys Ser Ala Asp		
	130	135	140
Lys Thr His	Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu Leu Gly Gly		
	145	150	155 160
Pro Ser Val	Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr Leu Met Ile		
	165	170	175
Ser Arg Thr	Pro Glu Val Thr Cys Val Val Val Asp Val Ser His Glu		
	180	185	190
Asp Pro Glu	Val Lys Phe Asn Trp Tyr Val Asp Gly Val Glu Val His		
	195	200	205
Asn Ala Lys	Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser Thr Tyr Arg		
	210	215	220
Val Val Ser	Val Leu Thr Val Leu His Gln Asp Trp Leu Asn Gly Lys		
	225	230	235 240

Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala Pro Ile Glu
245 250 255

Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro Gln Val Tyr
260 265 270

Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln Val Ser Leu
275 280 285

Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val Glu Trp
290 295 300

Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro Pro Val
305 310 315 320

Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr Val Asp
325 330 335

Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val Met His
340 345 350

Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu Ser Pro
355 360 365

Gly Lys
370

<210> 5
<211> 371
<212> PRT
<213> Artificial sequence

<220>
<223> Amino acid sequence of murine IL-15/Fc (human mutated IL-15,
murine IgG2A) with CD5 leader

<400> 5

Met Pro Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly
1 5 10 15

Met Leu Val Ala Ser Cys Leu Gly Asn Trp Val Asn Val Ile Ser Asp
20 25 30

Leu Lys Lys Ile Glu Asp Leu Ile Gln Ser Met His Ile Asp Ala Thr
 35 40 45
 Leu Tyr Thr Glu Ser Asp Val His Pro Ser Cys Lys Val Thr Ala Met
 50 55 60
 Lys Cys Phe Leu Leu Glu Leu Gln Val Ile Ser Leu Glu Ser Gly Asp
 65 70 75 80
 Ala Ser Ile His Asp Thr Val Glu Asn Leu Ile Ile Leu Ala Asn Asn
 85 90 95
 Ser Leu Ser Ser Asn Gly Asn Val Thr Glu Ser Gly Cys Lys Glu Cys
 100 105 110
 Glu Glu Leu Glu Glu Lys Asn Ile Lys Glu Phe Leu Asp Ser Phe Val
 115 120 125
 His Ile Val Asp Met Phe Ile Asn Thr Ser Asp Pro Arg Gly Pro Thr
 130 135 140
 Ile Lys Pro Cys Pro Pro Cys Lys Cys Pro Ala Pro Asn Leu Leu Gly
 145 150 155 160
 Gly Pro Ser Val Phe Ile Phe Pro Pro Lys Ile Lys Asp Val Leu Met
 165 170 175
 Ile Ser Leu Ser Pro Ile Val Thr Cys Val Val Val Asp Val Ser Glu
 180 185 190
 Asp Asp Pro Asp Val Gln Ile Ser Trp Phe Val Asn Asn Val Glu Val
 195 200 205
 His Thr Ala Gln Thr Gln Thr His Arg Glu Asp Tyr Asn Ser Thr Leu
 210 215 220
 Arg Val Val Ser Ala Leu Pro Ile Gln His Gln Asp Trp Met Ser Gly
 225 230 235 240
 Lys Glu Phe Lys Cys Lys Val Asn Asn Lys Asp Leu Pro Ala Pro Ile
 245 250 255
 Glu Arg Thr Ile Ser Lys Pro Lys Gly Ser Val Arg Ala Pro Gln Val

	260		265		270
Tyr Val Leu Pro Pro Pro Glu Glu Glu Met Thr Lys Lys Gln Val Thr	275	280	285		
Leu Thr Cys Met Val Thr Asp Phe Met Pro Glu Asp Ile Tyr Val Glu	290	295	300		
Trp Thr Asn Asn Gly Lys Thr Glu Leu Asn Tyr Lys Asn Thr Glu Pro	305	310	315	320	
Val Leu Asp Ser Asp Gly Ser Tyr Phe Met Tyr Ser Lys Leu Arg Val	325	330	335		
Glu Lys Lys Asn Trp Val Glu Arg Asn Ser Tyr Ser Cys Ser Val Val	340	345	350		
His Glu Gly Leu His Asn His His Thr Thr Lys Ser Phe Ser Arg Thr	355	360	365		
Pro Gly Lys	370				